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THE BOREAL INSTITUTE

OR CLEANER AIR AND WATER

Pam 502.7
STANDARD

ANDARD OIL COMPANY ⟨INDIANA⟩

Pan American Petroleum Corporation

In North America, explores for and produces crude oil and natural gas liquids; buys, sells, and trades crude oil; explores for, produces, processes, and markets natural gas; conducts exploration and production research.

American Oil Company

Manufactures and transports petroleum products and fertilizers and markets them in 48 states and the District of Columbia; markets liquefied petroleum gas; conducts process and products research and development.

Amoco Chemicals Corporation

Manufactures and markets petrochemicals, petroleum additives, and plastic products world-wide. Conducts related research.

American International Oil Company

Outside North America, conducts integrated operations from petroleum exploration to product marketing.

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OUR OPERATIONS

A DRILLING RIG IN THE GULF OF MEXICO.

In the production of crude oil and natural gas, the refining of petroleum products, and the manufacture of chemicals and fertilizers, Standard Oil Company (Indiana) and its subsidiaries operate nearly 30,000 wells, more than 75 manufacturing and refining plants, dozens of ships and barges, thousands of miles of pipelines, and a great many storage and distribution facilities.

All these operations blend together complex technologies with the brainpower and skill of more than 45,000 employees in the U.S., Canada, and 40 other countries. More than 30,000 service stations sell the company's motoring products.

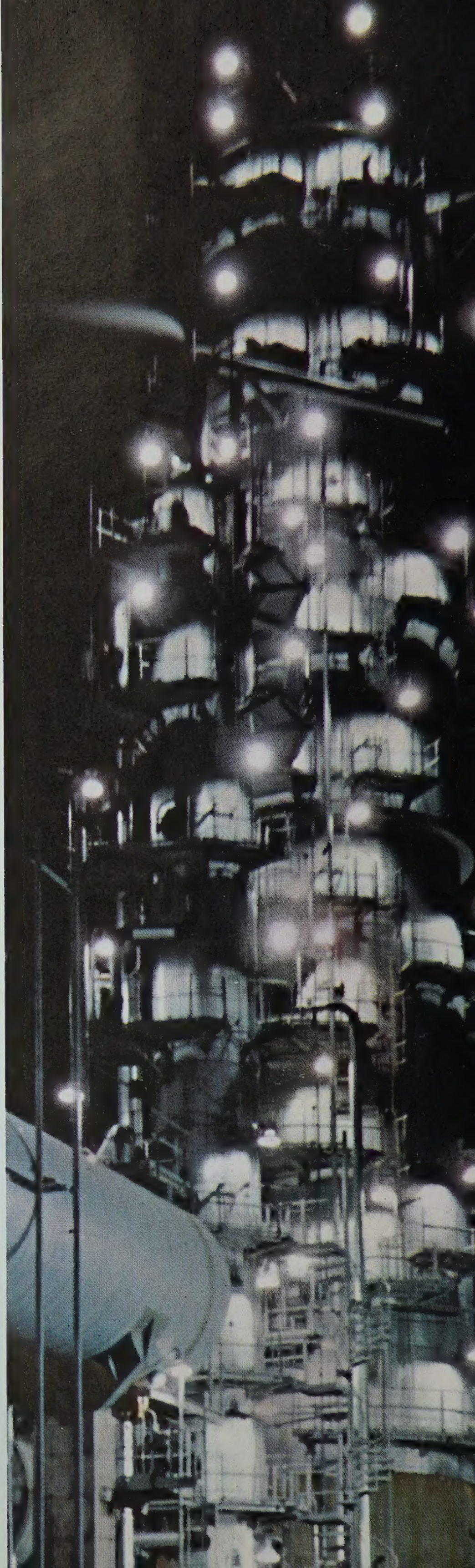
Among the resources needed to sustain these operations are capital, manpower, technology, and air and water.

Just as man must use air and water to live and to breathe, so does industry. But with the aid of modern technology, our company is seeking to reduce the quantities of the water used in our operations, and to minimize the discharge of wastes into both air and water.

As a good corporate citizen, Indiana Standard supports efforts to conserve air and water resources, and to manage them intelligently for the benefit of users—recreational, municipal, and industrial.

Conservation of air and water resources

A REFINERY AT NIGHT.



AMERICAN
AMERICAN
AMERICAN
AMERICAN HEATING OILS with STA CLEAN
THIS VEHICLE STOPS AT ALL RAILROAD CROSSINGS

FUEL DELIVERY.

in our company is rooted in decades of operating experience. The first pollution abatement facilities were installed in our refineries more than half a century ago, long before pollution became a matter of national concern.

Over the years, this activity has grown in scope as new refineries and chemical plants were built, and new and better treatments evolved. Conservation is practiced in exploration and production on land and offshore, in the transportation of crude oil and refined petroleum products, in storage, and in distribution. The company's concern extends to the final use of our products, as evidenced by efforts to help reduce and eventually eliminate pollution from the internal combustion engine.

In implementing our conservation policy, we strive to reduce the demand on water resources, to improve and modernize effluent treatment, to reduce stack emissions, to add new and improved equipment, to prevent pollution incidents, and to assure that our installations comply with federal, state, and local requirements.

The company has intensified its research program, both in our own laboratories, and with others. In addition to joint research projects conducted with the American Petroleum Institute, we have joined the Ford Motor Company and several other oil and auto companies in a special research program to bring about a reduction in emissions from gasoline engines through changes in hardware design and fuel composition.

This brochure provides a glimpse of how Indiana Standard in all its operations is contributing to air and water conservation.

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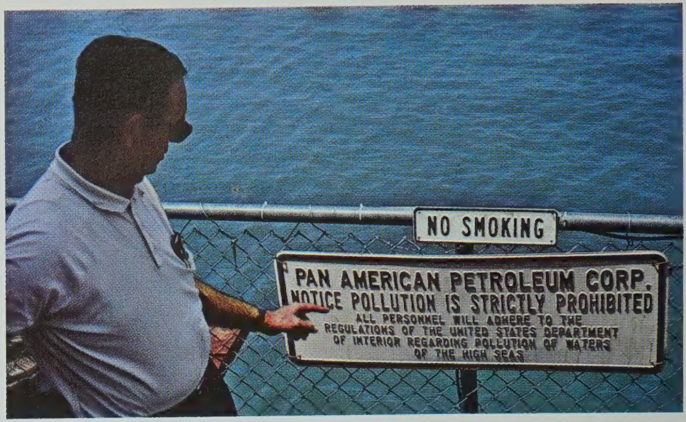
SPOTTER PLANE CHECKS PIPELINES.

A NEW FUNCTIONAL SERVICE STATION.

FUELS RESEARCH.

EXPLORATION & PRODUCTION

Pan American Petroleum Corporation
American International Oil Company


NO SMOKING
PAN AMERICAN PETROLEUM CORP.
NOTICE POLLUTION IS STRICTLY PROHIBITED
ALL PERSONNEL WILL ADHERE TO THE REGULATIONS OF THE UNITED STATES DEPARTMENT OF INTERIOR REGARDING POLLUTION OF WATERS OF THE HIGH SEAS

ANTI-POLLUTION WARNING ON PLATFORM.

To discover crude oil and natural gas and extract them from the depths of the earth, Standard Oil people may be found working on all the continents or offshore. Wherever they are, they are urged to abide by the principles of good conservation.

There are good examples of conservation in all of our exploration-production operations.

In offshore marine seismic operations, non-dynamite sound sources, such as airguns and mechanical vibrators, are used to ensure that fish are not endangered. On shore and in inland bays special precautions are taken in seismic work to avoid damaging oyster beds and alligator nests, and not to disturb such rare and temperamental wildlife as whooping cranes on game preserves.

Some other examples: On the Kenai Peninsula in Alaska, no winter seismic trails are cut lower than two feet above ground level in order to protect the area from erosion. During drilling operations on Marsh Island, La., Pan American went to great expense to protect the surrounding fresh water, an important breeding area for alligators and fur-bearing animals.

This continuing concern is illustrated by mounting expenditures for water and air conservation equipment, especially in our efforts to prevent any water pollution.

Effective disposal of water produced with crude oil and gas represents one of Pan American's major contributions to conservation.

Domestic company-operated properties produce about one and a quarter million barrels of water each day—about two and a half barrels of water for each barrel of crude oil. However, this large volume of water, much of which is salty, poses no major pollution problem, since the company has over the years installed equipment, and developed methods, to dispose of it adequately and safely.

Much of the water is reinjected into subsurface formations for waterflood or disposal purposes. Better quality water is safely released into drainage systems and coastal waters.

In some areas, particularly where small volumes of water are involved, evaporation pits are a safe and efficient means of disposal. Many of these pits are lined with leak-proof material to prevent the produced water from seeping into underground fresh water supplies.

In the Gulf of Mexico, special water collection and treating equipment removes hydrocarbons from the water before it is released. In Alaska's Cook Inlet, the small amount of produced water is transported to shore with the oil. After processing onshore to remove hydrocarbons, the clean water is pumped back into the Inlet.

Since our operations are widespread, and water quality varies from field to field, each field must be individually considered and evaluated, then equipped with the facilities needed for proper disposal of the water.

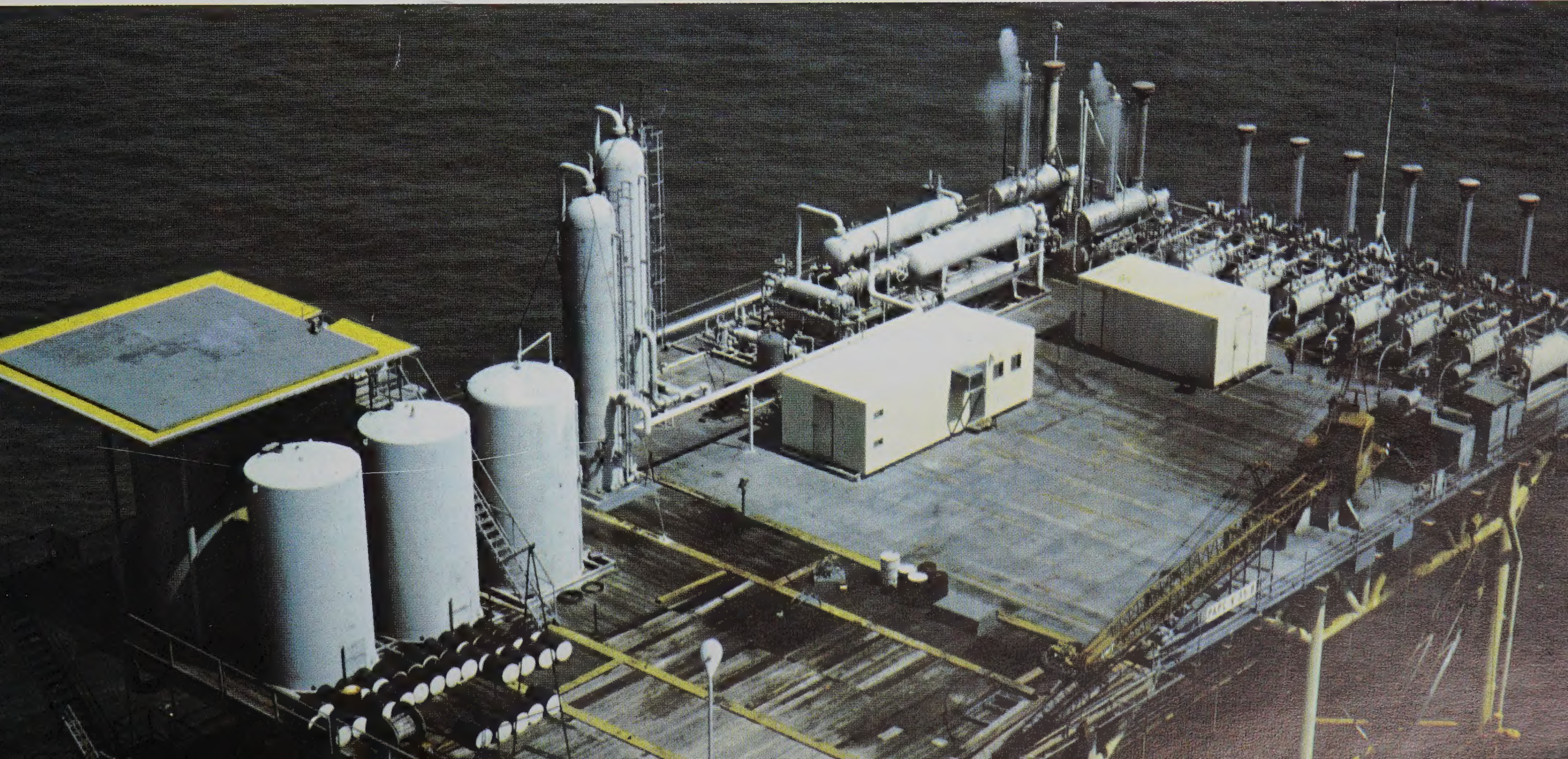
The methods vary, depending on the quality of the water, local natural disposal facilities, and other factors.

In the same way, pollution abatement methods in overseas operations are adapted to local conditions.

Responsibility for safe and effective disposal of production water originates with field operating management, which maintains surveillance to assure proper operation and maintenance of water purification equipment.

This surveillance includes inspecting company facilities to detect potential pollution or prevent its occurrence, seeking out potential sources of water pollution such as leaks in barge and tank truck loading facilities, and establishing emergency procedures to deal with accidental oil spills or contamination by production salt water.

EXPLORATION AND PRODUCTION.



TRANSPORTATION

American Oil Company
Service Pipe Line Company
American International Oil Company

To reach our refineries, marketing terminals, and finally the consumer, millions of barrels of crude oil and refined petroleum products travel billions of barrel-miles every year over land and water.

In Standard Oil, transportation and marketing of products in gaseous, liquid, and solid form affect every operating subsidiary. Elaborate procedures are followed to permit the safe delivery of crude oil and products, and to prevent spills, leaks, and other possible pollution accidents.

Service Pipe Line Company, a common carrier with 14,000 miles of crude oil pipeline in 18 states, links 28,500 producing oil wells with nine of the company's 12 domestic refineries, and delivers to approximately 40 others through connecting carriers.

Altogether, Service moves an average of about a million barrels of oil per day for an annual transportation total of approximately 170 billion barrel-miles. This represents about 12 per cent of the U.S. total oil moved by carriers reporting to the Interstate Commerce Commission. Effective August 1, 1969, operations of Service Pipe Line Company are being performed for Service by American Oil Company.

In addition, American's product pipelines carry annually nearly 21 billion barrel-miles of refined petroleum products.

Overseas, American International Oil Company operates gathering and trunk pipelines serving production operations and refineries.

Pipelines present little in the way of a pollution problem.

Newer lines, properly installed, maintained, and operated, are highly leak resistant when coated and cathodically protected. Both overland and underwater lines are protected against corrosion by cathodic protection systems. Great care is taken in the laying of pipelines to guard them against possible damage from construction work, and scraping by bottoms and anchors of passing ships. On land, lines are installed well below normal plowing depth, and special protection is provided at road and river crossings.

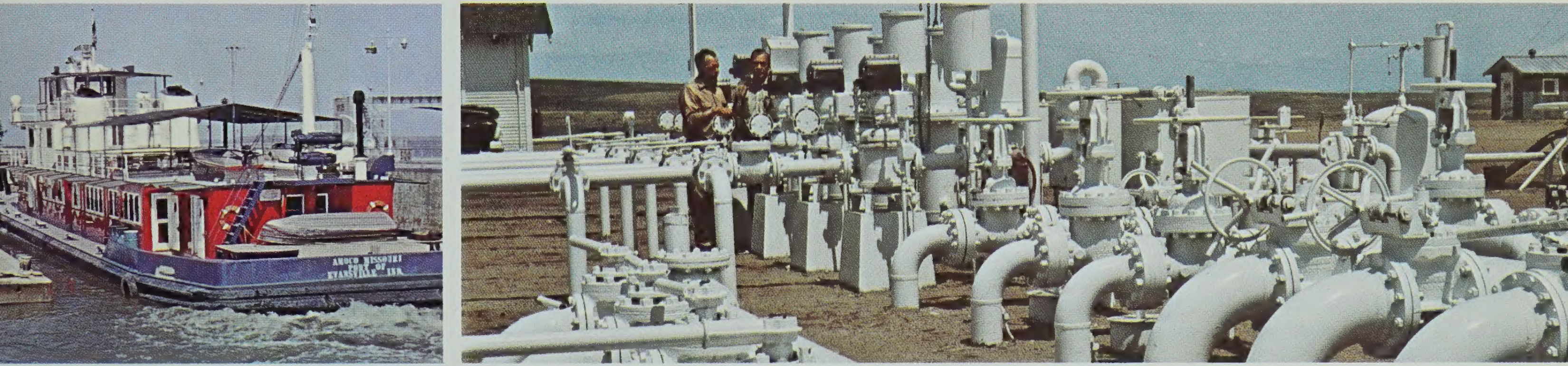
As a precaution against leaks and breaks, the company regularly monitors, tests, and surveys all its pipelines both on the ground and from the air. Around-the-clock watch of unmanned pumping stations is maintained at manned stations with the help of telemetered operating information and automatic alarm systems.

Line maintenance crews equipped to repair any leak or break are on standby at strategic locations within easy reach of any potential accident site. Older lines which may be subject to corrosion and possible pit and collar leaks, etc., are periodically phased out and replaced with new pipes.

On the high seas and on inland waterways, large quantities of crude oil and finished products are shipped in tanker fleets and barges by both American Oil and American International Oil.

Its newer tankers, such as the recently-built *Amoco Cremona* and *Amoco Brisbane,* incorporate some of the most modern oil-water separation devices and pollution abatement equipment. Older ships and inland barges are also continuously being modernized.

Our company rules strictly prohibit the discharge of any oily water not only in ports, navigable waters, or proximity of shores, but even in mid-ocean.



IN TRANSPORTATION, SAFEGUARDS AGAINST POLLUTION RANGE FROM PROTECTION FOR PIPES TO SPECIAL EQUIPMENT ON BARGES, SHIPS AND TRUCKS.

It is common practice for ocean-going tankers to fill their empty compartments with ballast water for greater stability on the high seas. This oily water must be discharged before the ship can take on another load. Almost universally, in the past, this ballast was dumped into the ocean, sometimes even in harbors.

Today, docking facilities are increasingly being equipped with retention tanks and/or oil water separators to hold and treat this ballast water.

Although pollution prevention in U.S. ports is now rigorously enforced, strict regulations on ballast disposal, imposed by us and other conservation oriented oil companies, represent a voluntary effort by the petroleum industry to keep the seas clean.

In ports where facilities are not available to store or treat ballast residue, the Standard Oil policy calls for adherence by company or charter ships to the so-called "load-on-top" procedures. This requires all oil water slop from cargo tank washing to be retained aboard the vessel and isolated in one cargo tank.

This slop is allowed to settle or "decant" until separation of oil and water is achieved. The clean water is then slowly pumped out, leaving the oil residue which then contains a minimum of water. If the cargo to be loaded at the next port is compatible with the previous cargo, then the cargo is loaded on top of these residues, keeping this tank isolated from the balance of the cargo.

The terminal or refinery receiving the cargo may require separate tests on the contents of this tank, and may insist that it be discharged separately from the balance of the cargo.

If the cargo to be loaded is not compatible with the previous cargo and/or its residue, the residue is then safely discharged ashore.

Precautions have been taken to protect our offshore loading platforms and docks from pollution accidents. Sumps and automatic sump pumps have been installed on drilling and production platforms to prevent leakage of oil.

New preventive measures at some marine terminals include "diapering" of docked ships with booms, automatic pumping cut-offs in the event of a spill, sound and light alarm signals, floodlights for night operations, and close supervision of all vessel loading and unloading operations.

To facilitate our dealing with non-English speaking masters and crews, pertinent regulations of the U.S. Coast Guard, port authority, and company have been translated into a number of foreign languages.

Responsibility for violation of these regulations, and liability for any clean-up, or any damage which may result from marine spills by charter tankers, is also being written into our charter contracts as new ones are prepared.

In over-land transportation, safeguards against spillage, leaks, and evaporation are being provided in tank trucks and railroad cars.

Although the problem of gasoline evaporation is a relatively minor factor in the overall air pollution picture, our increased use of floating roofs on gasoline storage tanks, at substantial expense, is intended to reduce air pollution even further as a factor in the handling of petroleum products.

REFINING

American Oil Company
American International Oil Company

The water needs of the company's 12 domestic and two foreign refineries range into many millions of gallons per day. But most of the water used in refining is merely "borrowed" for varying periods of time.

Refineries use water in processing, cooling, steam generation, clean-up, and sanitation.

Before being returned into streams and lakes, the water is treated in complex technological processes, often with multimillion dollar facilities.

What happens to the water in a refinery?

Used water is generally first collected in separate disposal systems and segregated according to the amount and type of contaminants. Rain water falling outside the process area, for example, may enter a storm sewer that by-passes the main treatment plant. But because such water may occasionally pick up traces of oil, it may have to be put through an oil-water separator before it is discharged.

Cooling water, even if used only once, is always cleaned in oil-water separators.

A separate collecting system is used for process water, which has been in contact with oil, chemicals, and other contaminants, and for rain water that falls inside the area of the process units. This system usually leads to the refinery's primary and secondary treatment facilities.

In the case of refineries supplied by ship, it is also necessary to collect and treat the ships' ballast. Still another system handles sanitary sewage, which is treated biologically or by other accepted methods either in refinery-owned facilities or in municipal treatment plants.

Equipment used in water treatment varies from refinery to refinery, depending on size, location, climate, availability and source of water, age of the refinery, and degree of modernization.

Much of the technology for refinery effluent water treatment in American Oil was developed in our oldest refinery, at Whiting, Indiana.

Today, Whiting has one of the most extensive effluent treatment facilities of any refinery in the country. Since World War II this refinery alone has spent more than $10,000,000 to improve effluent quality control facilities.

The Whiting treatment plant includes the world's largest battery of API design oil-water separators, a total of 34 units covering four acres. There oil floats to the surface and is skimmed off, while other devices remove sludges which settle to the bottom of the tanks.

From the separators, waste water goes into a six-acre basin divided into compartments where it receives biological treatment. Oxygen is added with the help of "floating pumps," and specially designed rotating oxygenation brushes.

Other features of the Whiting refinery effluent treatment include: de-oiling and de-watering of sludges by centrifugation, separate disposal of spent caustic, acids, and other treating chemicals; large scale in-plant monitoring of key installations; good housekeeping and control measures to minimize the loss of oil, chemicals, and suspended solids to the collecting system, and the routing of sanitary sewage to the municipal treatment plant.

A newly developed multimillion dollar final purification system is being added to the refinery's effluent treatment facilities. This adaptation of chemical coagulation and air flotation techniques to refinery effluent treatment was developed by company researchers. It will assure maximum cleanliness for process water returned from the refinery to Lake Michigan.

Our refinery at Sugar Creek, Missouri, uses turbine-type aerators, rather than brushes, to agitate and add oxygen to the water.

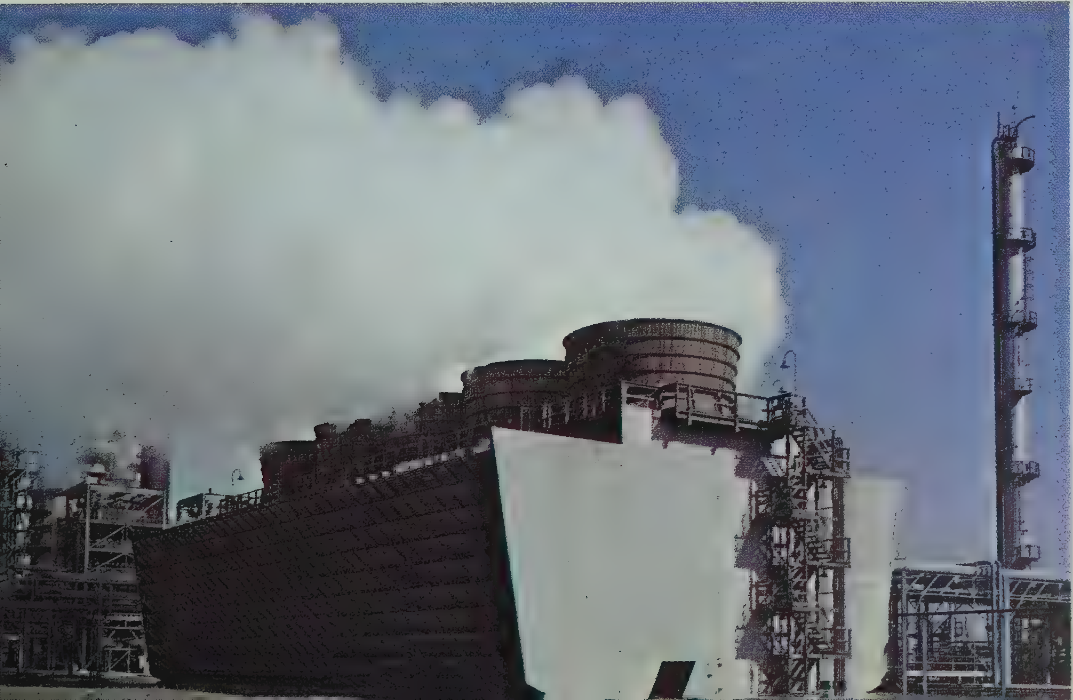
A large system of settling ponds at our Neodesha, Kansas, refinery allows nature itself to carry out a slower, but equally effective, method of purification. Installed over a period of nearly 40 years, the ponds now cover 99 acres and hold refinery effluent for as long as six months. When we discharge it into the nearby Fall River, it meets the rigid state requirements.

At Mandan, North Dakota, we have a smaller and newer refinery. Its terminal treatment plant, though, works on the same principle.

At Casper, Wyoming, we maintain the largest and most unusual pond system of all. Used water from the refinery's separators is pumped across a mountain and into a 12-acre settling basin.

When solids have settled out, the water is siphoned into a 400-acre pond that has no outlet. Water lost by evaporation and seepage balances the input of about two million gallons a day. Because of the large surface area, the water is oxygenated and purified entirely by natural means.

SOUR WATER STRIPPER REMOVES CHEMICALS FROM PROCESS WATER (ABOVE), WHILE COOLING TOWERS PERMIT RE-USE OF WATER. THEY RELEASE STEAM, NOT SMOKE.



The system works so well that waterfowl and other wildlife flourish on and around our man-made lake.

Among the by-products of refining operations are many gases and particles which, if not properly controlled, would materially contribute to increases in air pollution.

This is why, in addition to extensive water treatment facilities, refineries also spend millions of dollars on the control of emissions into the atmosphere. A variety of complex devices is used to control air pollution in refineries. Among others, these include:

Large multi-stage cyclone separators which control fine particles from escaping into the air by using centrifugal force to throw them out of the gas stream. Larger particles are often removed in wet scrubbers, which wash them out by using liquid spray. Gases are burned off in a flare.

Another costly refining process is the separation of hydrogen sulfide from process streams and its recovery as elemental sulfur or other useful products. Control of this foul smelling pollutant generally requires complex technology.

Abatement of both air and water pollution in refineries, aside from large investment in equipment, requires substantial operating expenditures and skilled personnel.

In the same way and with the same care, the modern refineries operated by American International Oil Company in Cremona, Italy, and Brisbane, Australia, operate their air and water pollution abatement facilities.

CHEMICALS & FERTILIZERS

Amoco Chemicals Corporation
American Oil Company

SAMPLING SOIL.

Eight major and nearly two dozen smaller chemical plants throughout the U.S., and several abroad, are owned by Amoco Chemicals Corporation. They produce additives, aromatic acids and esters, resins, polybutenes, polymers, styrene monomer, methyl mercaptan, plasticizers, solvents, and plastic products. End products range from automobile parts to nightgowns of zephyr cloth.

Because of the complexity of chemical processes used in Amoco's operations, water treatment and air pollution abatement methods vary greatly from plant to plant.

In newer facilities, such as the styrene monomer plant at Texas City, the large and complex effluent treatment plant rates among the best in the world.

At Decatur, Ala., where capacity of the aromatic acids plant has recently been doubled, an expanded waste treatment installation incorporating the most advanced water treatment technology and a large surface drainage pond have been added. Waste disposal will be augmented by three separate incinerators—one to burn trash, one for oxidation sludges, and one for heavy hydrocarbons.

A new aerated 20-acre pond has been added at Joliet, Illinois, where an activated sludge unit has been in operation for a number of years.

Waste treatment and disposal facilities in several plastic fabricating plants are being expanded and modernized.

Liquid and solid fertilizers to meet the needs of virtually every crop and soil are manufactured and sold by American Oil Company.

Like the refineries and chemical plants, all fertilizer and pesticide manufacturing facilities maintain air and water pollution abatement facilities.

In addition, the company's researchers constantly strive to improve fertilizer products and pesticides, optimize their performance, and reduce pollution hazards which may result from improper or excessive application.

PESTICIDES, CHEMICALS, AND PLASTICS
PRODUCED IN OUR PLANTS.

THE AUTOMOBILE

American Oil Company
Amoco Chemicals Corporation

Air pollution is many things—smoke, dust, fumes, and gases.

Every year, an estimated 165,000,000 tons of pollutants are released into the American skies. A large portion of these is produced by automobiles, but a great deal is being done to correct this situation.

Undesirable hydrocarbon and carbon monoxide emissions already have been reduced by more than 60 per cent for new cars since control devices were added in the early sixties.

Today, the oil companies and automobile manufacturers are working to eliminate the remaining pollutants from the automobile, and to produce a virtually pollution-free car for the motorist of the seventies.

How is this being done?

Proposed solutions emerging from our own laboratories, those of other oil companies, the automobile industry, and government, point increasingly to a clean modified gasoline engine.

Such an engine, within reach in the next few years, will continue to provide the kind of power, comfort, convenience, and economy that the American motorist expects from his automobile, while getting rid of its air polluting characteristics.

We are helping in this effort through research programs of our subsidiaries, American Oil Company and Amoco Chemicals Corporation, at our Whiting, Ind., automotive laboratories, and through participation in multi-million-dollar automotive and petroleum industry research programs.

Some 95 per cent of automotive pollution results from incomplete combustion of the air-fuel mix in the engine, and about 5 per cent from fuel evaporating from the gas tank and the carburetor.

Our company has a two-pronged effort aimed at both:

1. To develop more efficient and economical non-polluting gasolines, additives, and lubricants.

2. To help the automotive industry redesign the internal combustion engine to burn fuel more efficiently and to develop emission and evaporation control devices for the carburetor, fuel tank, crankcase, and tail pipe.

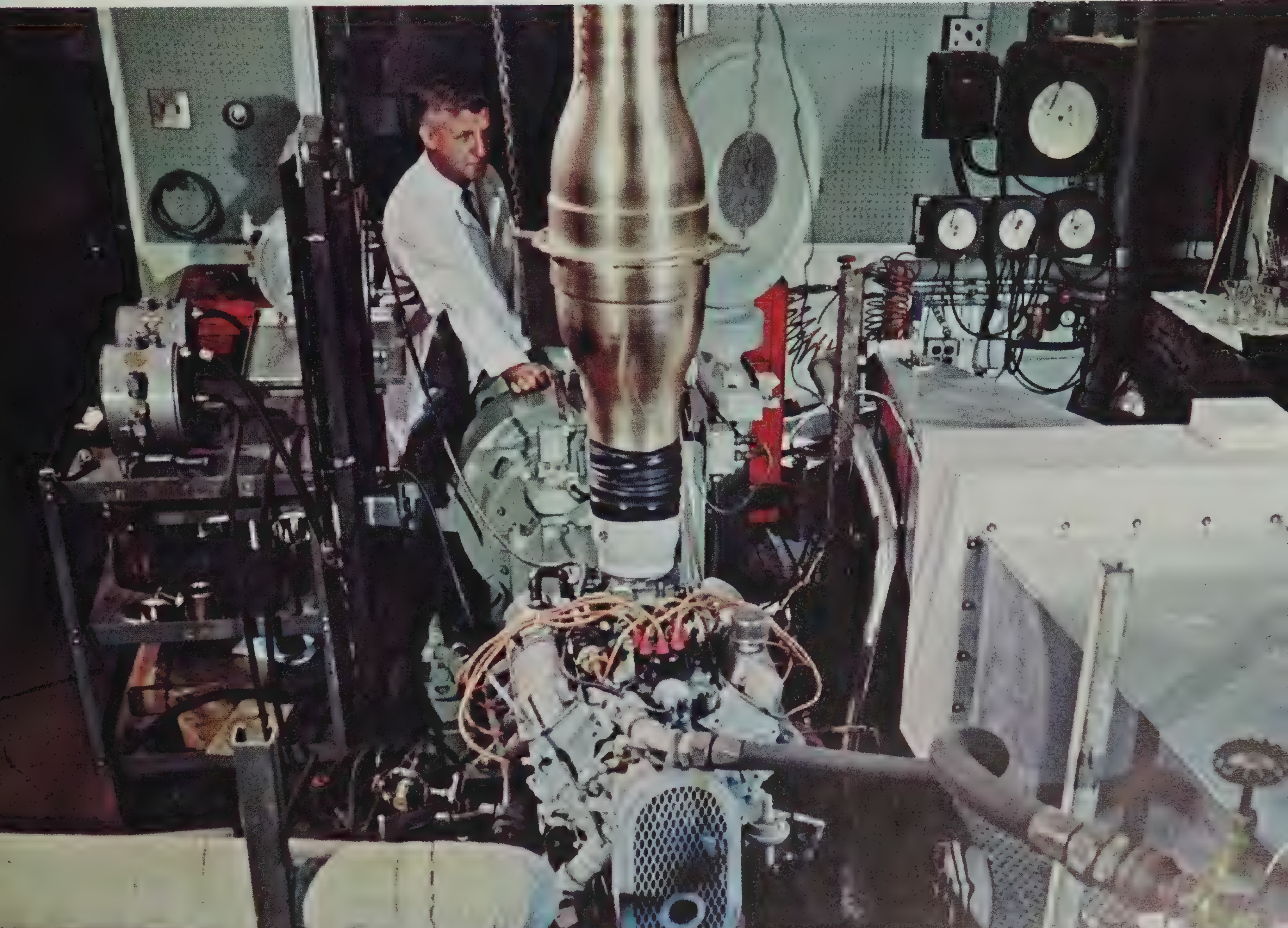
Essentially, we use a task force approach in studying and testing all phases of combustion and exhaust streams. This approach seeks to break problems into basic elements, and to find solutions that would not impair desirable operating and performance characteristics. We simulate virtually every imaginable driving condition. Exhausts are trapped and analyzed by intricate instruments, some developed at Whiting.

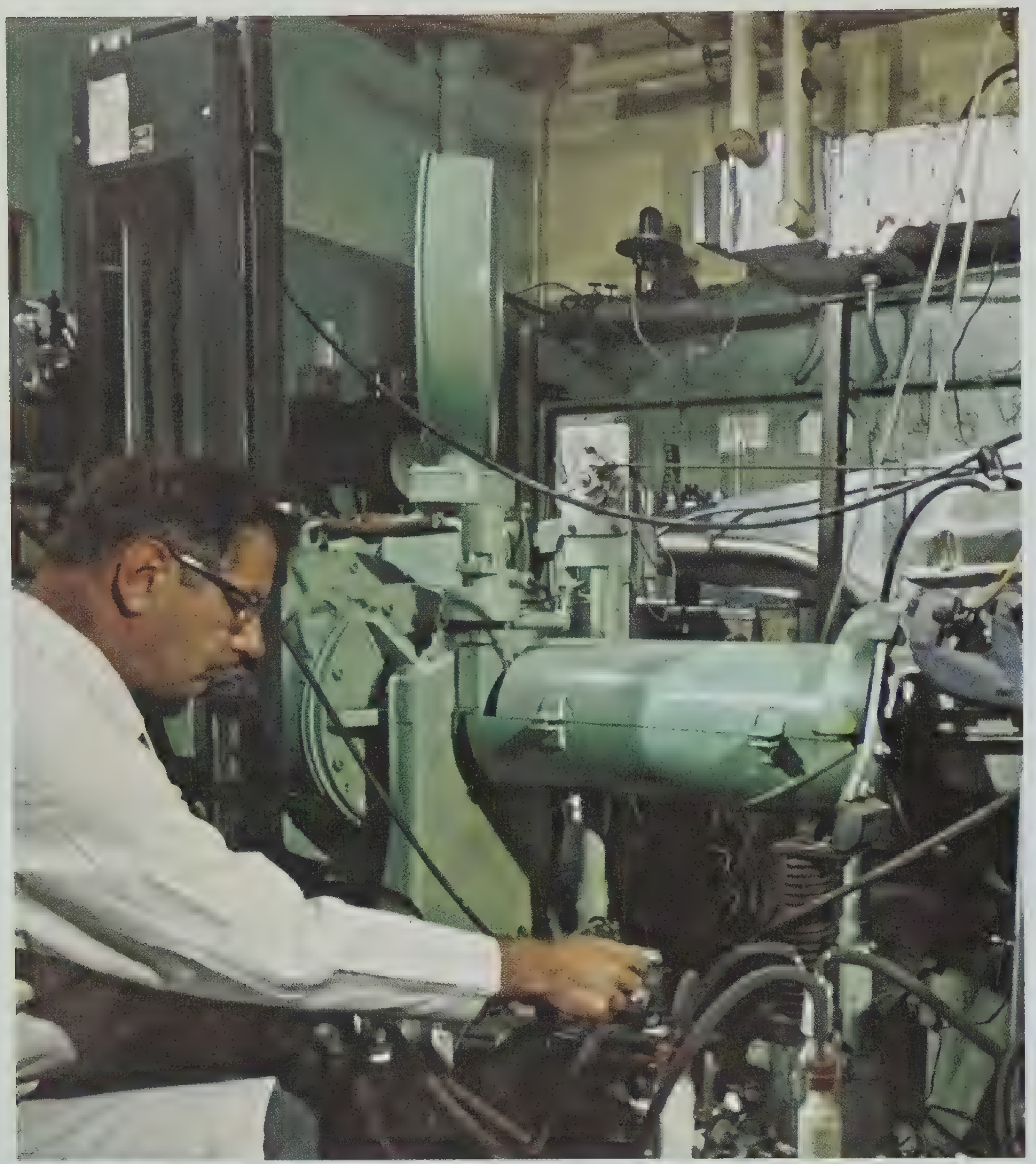
Much of the research is centered on interaction of the various emissions under diverse climatic and atmospheric conditions.

One large joint study is the $7 million Inter-Industry Emission Control Program, one of the most comprehensive private research ventures ever undertaken in the automotive and petroleum fields. Participating oil companies use their know-how in fuels, lubricants, and catalysts, while the Ford Motor Company concentrates on developing new hardware.

Comprising 15 major research projects,

CHECKING DIESEL EXHAUSTS WITH "NOSE-METERS."
AUTOMOTIVE RESEARCH FACILITIES (BELOW, RIGHT).





AUTOMOTIVE EXHAUST RESEARCH.

including several at our Whiting laboratories, this program is scheduled to be completed in 1970.

Its goal is a gasoline engine that will reduce hydrocarbons from 900 parts per million (ppm) to 65 ppm; carbon monoxide from 3.5 per cent to 0.3 per cent, and oxides of nitrogen from 1,500 ppm to 175 ppm.

Our company participates in another major three-year automotive research program through its membership in the American Petroleum Institute. It is conducted by the Coordinating Research Council (CRC) an independent, non-profit organization.

This $12 million program is supported by the automobile and petroleum industries together with the U.S. Department of Health, Education, and Welfare. Supplementing existing programs, it consists of 27 major research projects involving fundamental air pollution—such studies as driving habits, the effects of fuel volatility on total automotive emissions, and effects of emissions on human health and behavior.

These studies indicate that the internal combustion engine is on the verge of transformation into a virtually pollution-free source of power.

As for steam cars, electric cars, gas turbines, and engines using liquefied natural gas, they are most likely to find their place in the years ahead as second cars or for specialized uses.

RESEARCH

Standard Oil scientists and technologists have harnessed many scientific disciplines to help measure, control, and eliminate pollutants from the company's operations.

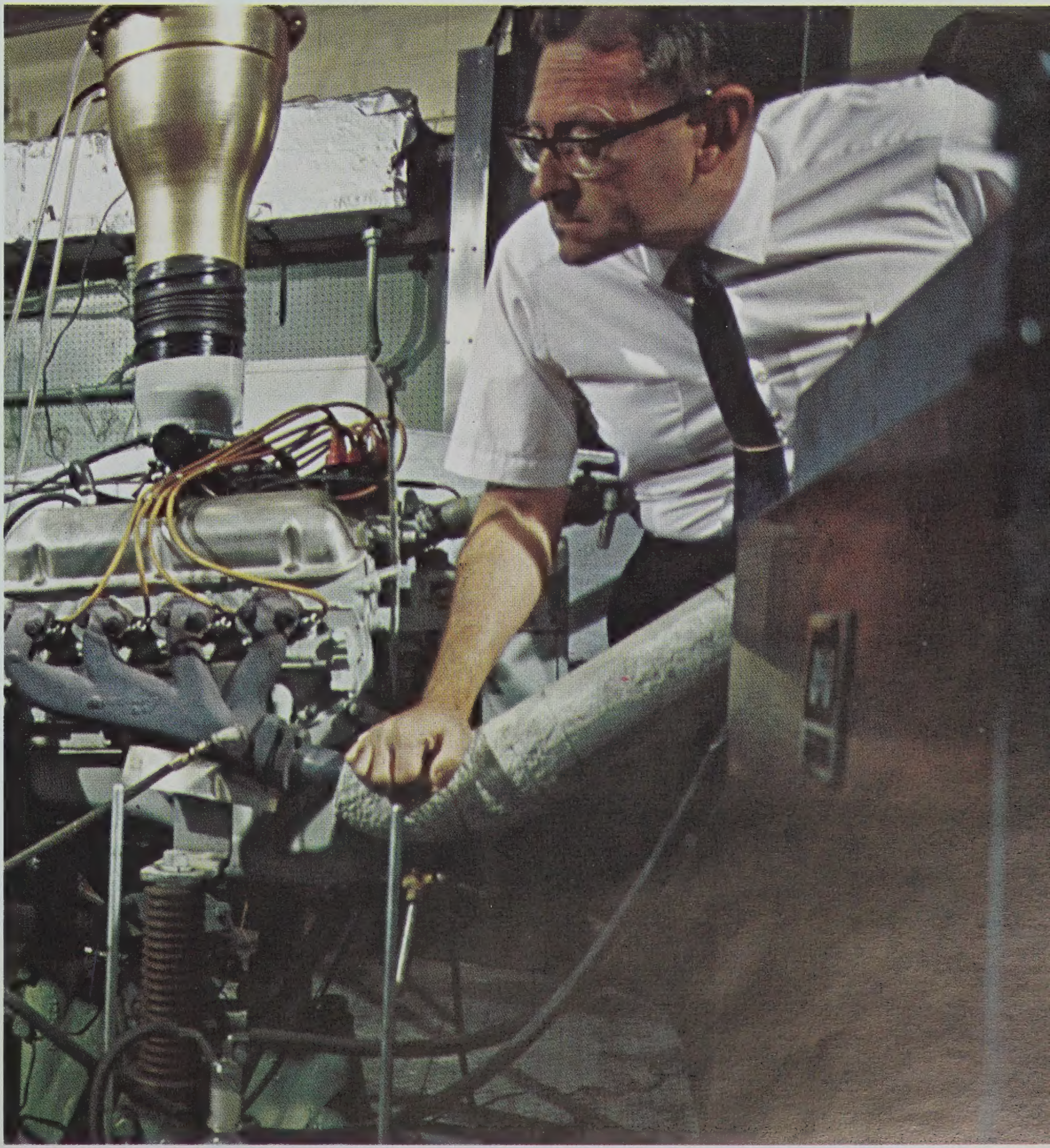
Over the years the company has developed new effluent water treatment and air pollution abatement techniques which rate among the best in any industry. Many conventional treatment processes have also been adapted, modified, and improved to meet the needs of our petroleum and chemical operations. Today, the scientific battle against pollution is being waged with intensified vigor throughout the company.

Progress in the area of refinery effluent quality control is characterized by continued improvements and plant modernization. It stems from novel developments and the adaptation of available technology to the cleansing of water used in refining operations.

Over the decades, this has involved research in the areas of activated sludge treatment, trickling filters, use of both natural and mechanically aerated oxidation ponds, chemical coagulation, chlorination, ozonation, and numerous other treatment methods. As an outgrowth of these studies, a patented bio-flotation process was developed. It is based on the principles of gravity settling, biological oxidation, air flotation, and gas stripping.

Most recently, research and pilot plant work have centered on the development of alternate tertiary treatment processes for further cleaning of refinery process streams.

As a result of this work, a unique



ENGINE PERFORMANCE IS CAREFULLY TESTED.

application of chemical treatment and air flotation in conjunction with biological treatment was developed. Based on this research, a novel combination treatment sequence was developed for the Whiting refinery. This multi-million dollar addition to the existing treatment plant is scheduled for completion in 1970.

Another area of research involves disposal of sludges produced in water treatment and other refinery operations. One of these research programs, the adaptation of fluid-bed incineration technology to the disposal of chemical wastes and sludges at our Mandan, N.D., refinery, is being partly financed by a research grant from the Federal Water Pollution Control Administration. This study may benefit the entire petroleum industry, if it should demonstrate that this technology can be used for the disposal of a variety of industrial wastes.

As an outgrowth of our research into oil spillage prevention and clean-up, the research department has produced two unique new devices. One is a catamaran-mounted skimmer to remove spilled oil from the surface of the water. Another is a non-igniting, compressed-air gun for throwing a line across rivers and canals to draw an oil retention boom into place and help entrap oil slicks.

Extensive research has also helped improve products and processes. This too, has helped improve the quality of our environment. A good example of a new facility that reduces both air and water pollution is the installation at the Whiting refinery of a new heavy-oils hydrogenation unit. This unit eliminates problems due to contamination of the refinery effluent with acids and clays used in the previous processes. It also eliminates sulfur dioxide emissions to the atmosphere.

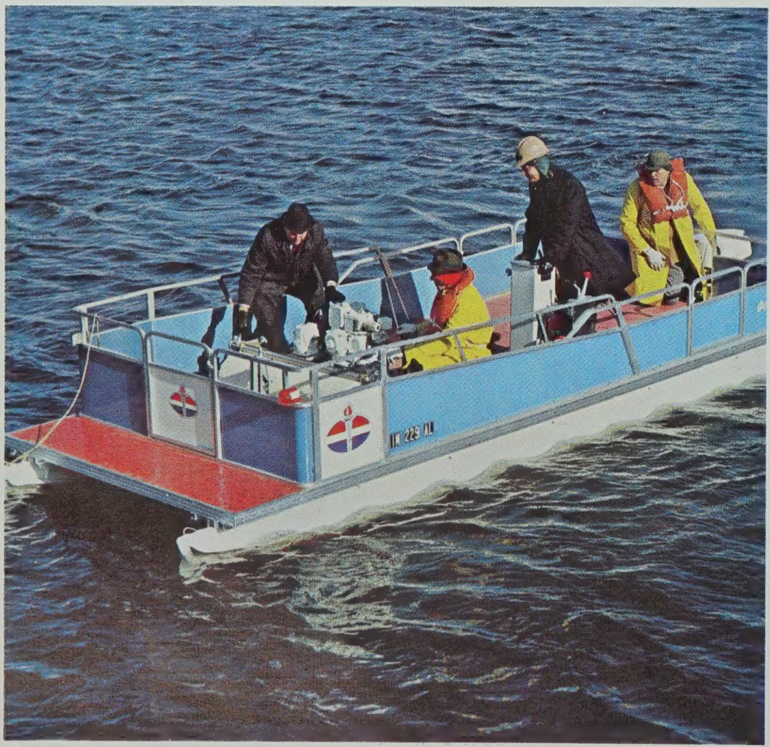
Improved stripping towers were installed to help remove hydrogen sulfide and ammonia from the process water stream prior to final treatment. Although this basic process is not new, it did involve numerous innovations in design to bring it to peak efficiency.

In the area of air pollution control, a number of our refineries have pioneered the monitoring of ambient air quality. This effort has helped to insure that air quality standards are not violated by our operations and has provided data for meaningful pollution control legislation.

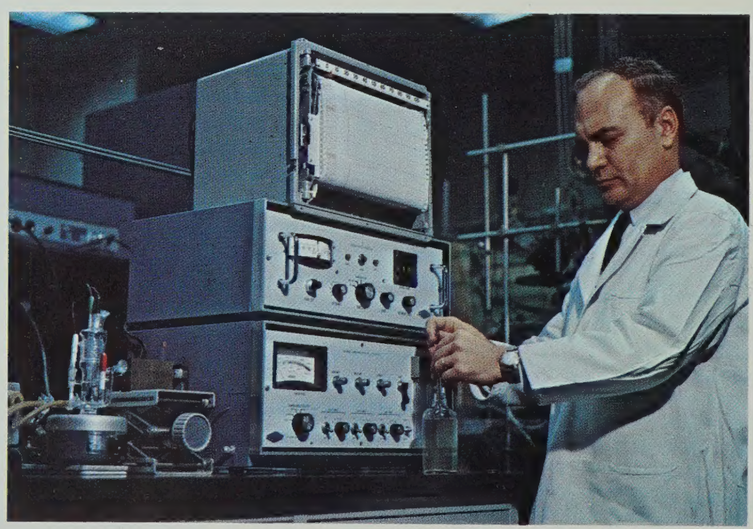
Since sulfur oxides are among contaminants which are believed to contribute materially to air pollution, extensive research and development programs are being carried out in the field of product desulfurization. This research has enabled the company to develop new sulfur removal processes for the clean-up of gasolines and home heating oils.

In the automotive field, aside from in-house research programs on non-polluting gasolines, gasoline and diesel fuel additives, and lubricants, company researchers are participating in the Inter-Industry Emission Control and the Coordinating Research Council programs.

In looking ahead, our scientists and engineers still see many challenges. But they are confident that with determination, perseverance, added resources, and their own skills, the struggle against pollution in our operations will be won.



TESTING OUR OIL-SKIMMER.



MEASURING DEVICES HELP CONTROL POLLUTION.

Our Air and Water Conservation Policy

Standard Oil Company (Indiana) and its subsidiaries have traditionally recognized the obligation to conduct their affairs as constructive corporate members of society.

To that end, we have long been a leader in environmental conservation activities, and have taken every appropriate step to contribute to society's efforts to conserve its irreplaceable environmental resources.

For the guidance of management and employees, and for the information of stockholders, customers, governmental units, and the public, we have formalized and put into writing our policy concerning environmental conservation.

Our policy is as follows:

Standard Oil Company (Indiana) and its subsidiaries, in all of their operations and activities, are dedicated to the best principles of management and conservation of environmental resources, including air and water. To implement this policy, we:

1. Establish and maintain controls for environmental conservation in company operations, facilities, and products.
2. Engage in company research and cooperate with others in research on associated technological and medical problems.
3. Cooperate with all levels of government to seek efficient and practicable regulations, controls, and enforcement.
4. Provide funds and competent personnel to deal energetically with all these matters.

University of Alberta Library

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Standard oil company(Indiana).

For cleaner air and water.

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